

Identification tricks of the Trade

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Life Stages

- Order Hemiptera
- Egg-nymph-adult
- Nymph: wing buds externally seen
- Adults: beak instead of mandibles, Forewing modification-hemelytra
- Wings held flat over body



Key Features for Hemiptera

- Hemelytra
- Beak



Taxonomy is Precise Observation



- Structures to look at:
- Shape of head
- Eye position; width between compound eyes
- Antennal segment size
- Rostral length
- Don't be fooled by colors
- What do you see in these two insects?



Family Reduviidae: Assassin Bugs, Kissing Bugs



More Examples



Now for AZ Triatoma species: *Triatoma rubida*



Characters for *T. rubida*



- **Nymphal Characters**
- **Orange median head stripe**
- **Posterior orange spots, abdominal segments**
- **Broad Pronotum, narrow wing buds**
- **Adult Characters:**
- **Broad shorter head**
- **Short stout snout**
- **1st antennal segment reaches tip**
- **Narrow abdomen more markedly orange trimmed**

Triatoma recurva



- **Nymphal characters:**
- **No head markings**
- **Abdominal segments edged entirely in orange**
- **Wing buds widely divergent**
- **Distinct median orange spots on abdomen**
- **Adult Character**
- **Elongate, pointed head**
- **Snout extremely pointed**
- **1st Antennal Segment not reaching tip of snout**
- **Abdomen exceedingly wide and concave, narrow orange edging**

Triatoma protracta



T. protracta protracta

5 subspecies described

T. protracta protracta widespread

T. p. navajoensis: Colorado Plateau

T. p. woodi: Rio Grande Drainage

T. p. zacatecensis: C. Mexican Plateau

T. p. nahuatlae: Sonora & Sinaloa

Adult characters

Head elongate, 1st antennal not reaching tip: Snout pointed

Abdomen narrow, mostly dark: Note typical light X formed by forewings

Note pruinosity on pronotum of *navajoensis*



T., p. navajoensis

Triatoma indictiva



- Similar in shape to *T. recurva*
- Head broader between eyes
- Abdominal segments marked by thin orange bands



Compare Nymphs

T. recurva



- Head shape
- Wing pad design
- Abdominal markings



T. rubida



Compare Adults



Mistaken identities



- Coreidae: large visible populations, plant associates, but brown with wings similar
- Largid bugs, seed eaters with orange abdominal markings